Table 23. Remote sensing methods and the indicators to which they apply. **Y** = method collects information on this parameter; **FD** = extensive field data req'd; **EX** = Method and/or protocol is experimental at present; **Model** = method must be combined with a model to address indicator. This material was developed from the 2003 Sonoran Desert Network Land Cover/Use Workshop and follow up discussions with participants.

	METHOD:									
INDICATOR:	**MODIS**	**Aster**	**ETM+**	**SPOT**	**IKONOS**	**Quick Bird**	**Airphotos**	**Airvideo**	**LIDAR**	**Hyper-spectral**
Measurement Unit	250m/ 1km	15m/ 90m	30m	10m/ 15m	1m/ 4m	0.6m/ 2.4m	Variable*	Variable*	0.15 m Vert 0.30 m Horiz	Variable*
*Spectral Bands**	36 bands (nominal)	14 bands	7	7	4	4	1*	1 (2 if filters are used)	1-5 frequencies	226
*Cost/unit**	Nominally free	Nominally free	$.0175/ sq. km	French – cost?	$40/sq. km final product	$65/sq. km final product	Rel. high aircraft + processing	Rel. high aircraft + processing	Very high aircraft + processing	Ext. high experimental
LAND COVER:										
Vegetation – NDVI, SAVI, EVI	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**				**Y-EX**
Vegetation – Lifeform			**Y+FD**	**Y+FD**	**Y+FD**	**Y+FD**	**Y**	**Y**		**Y-EX**
Vegetation – Formation					**Y+FD**	**Y+FD**	**Y**	**Y**		**Y-EX**
Vegetation – Alliance					**Y?+FD**	**Y?+FD**	**Y+FD**	**Y+FD**		**Y-EX**
Vegetation – Height							**Y+FD****	**Y+FD****	**Y**	
Vegetation – Condition	**Y+ model**									

	METHOD:									
INDICATOR:	**MODIS**	**Aster**	**ETM+**	**SPOT**	**IKONOS**	**Quick Bird**	**Airphotos**	**Airvideo**	**LIDAR**	**Hyper-spectral**
Vegetation - mortality					**Y-EX**	**Y-EX**	**Y+FD**	**Y+FD**		
ECOSYSTEM:										
NPP	**Y-EX**									
Soil movement									**Y**	
Erosion Potential	**Y-EX**									
Soil Moisture	**Y-EX**									
Surface Temperature	**Y+ model**									
Albedo	**Y-EX**									
ET	**Y-EX**									
LAND USE										
Anderson Level I	**Y+FD**	**Y+FD**	**Y+FD**	**Y+FD**	**Y+FD**	**Y+FD**	**Y+FD**	**Y+FD**		
Anderson Level II					**Y+FD**	**Y+FD**	**Y+FD**	**Y+FD**		
Anderson Level III										

* resolution is a function of platform elevation above the feature surface.

** vegetation height is estimated from shadows or with stereo pairing of photographs

26 August 2003